

Appl. No. 09/428,982

Amdt. Dated: 3-15-2004

Reply to Office Action of December 17, 2003

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) An isolator mechanism for use with a housing having a bearing with lubricant in the housing and a shaft protruding through the housing, the isolator comprising:
  - a) a stator affixed to the housing and closely surrounding the shaft; a rotor rotating with the shaft and encompassing said stator;
  - b) said stator having a radial groove formed therein with the walls of said groove extending between said housing and said shaft;
  - c) the exterior surface of a first wall of said groove facing the interior of the housing;
  - d) an axial hole in said first wall at the lower extremity of said first wall from said shaft connecting said groove to said housing.
2. (previously presented) An isolator accordance with Claim 1, wherein said radial groove is more than one-half the radial dimension of said stator.
3. (previously presented) An isolator accordance with Claim 1, wherein said hole in said first wall of stator includes a axially sloping surface connecting said radial groove to said housing.
4. (previously presented) An isolator accordance with Claim 3, wherein said hole and said sloping surface are elongated.
5. (previously presented) An isolator accordance with Claim 3, wherein said hole and said sloping surface are milled in said first wall.
6. (previously presented) An isolator accordance with Claim 1, wherein the inside diameter of said stator is proportional to the diameter of said shaft.
7. (previously presented) An isolator accordance with Claim 6, wherein the proportion of said stator to said shaft is 0.005 inches per inch of shaft diameter.

8. (previously presented) An isolator accordance with Claim 4, wherein said hole and said sloping surface are elongated circumferentially.
9. (currently amended) An isolator mechanism for use with a housing having a bearing with lubricant in a housing and a shaft protruding through the housing, the isolator comprising:
  - a) a stator affixed to the housing and closely surrounding the shaft; a rotor rotating with the shaft and encompassing said stator;
  - b) said stator having a plurality of radial grooves formed therein with the walls of said grooves extending between said housing and said shaft;
  - c) the exterior surface of the first wall of the first of said grooves facing the interior of the housing;
  - d) an axial hole in said walls at the extremity of said walls from said shaft connecting said grooves to said ~~cavity~~ housing.
10. (previously presented) An isolator accordance with Claim 9, wherein said radial grooves are more than one-half the radial dimension of said stator.
11. (previously presented) An isolator accordance with Claim 10, wherein said hole in said walls of said stator include a sloping surface connecting said radial grooves to said housing.
12. (previously presented) An isolator accordance with Claim 11, wherein said hole and said sloping surface are elongated.
13. (previously presented) An isolator accordance with Claim 12, wherein said hole and said sloping surface are milled in said walls of said stator.
14. (previously presented) An isolator accordance with Claim 9, wherein the inside diameter of said stator is proportional to the shaft diameter.
15. (previously presented) An isolator accordance with Claim 14, wherein the proportion between said stator and said shaft is 0.005 inches per inch of shaft diameter.
16. (previously presented) An isolator accordance with Claim 12, wherein said hole in said stator is elongated circumferentially.
- 17- 26 (canceled)